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Minnesota Labor Market Review

December 1990

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Articles on labor market conditions and the economic welfare of Minnesota workers are welcome. Articles should be submitted complete with tables and graphs. Length should not exceed 8 double-spaced typewritten pages, including graphs, references, and notes. The editor reserves the right to edit articles for length and clarity.

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Feature Article

Clear As Mud

Ever wonder why the nonfarm payroll employment series and the total employment series often tell different--even conflicting--stories? Often, and seemingly inexplicably, changes in one series look nothing like changes in the other, sometimes even moving in different directions. Moreover, the basic employment levels sometimes don't seem right between the two series.

Look at the data for Duluth in Table 1., for example. It says, just for openers, that nonfarm payroll employment was between 11 and 13 thousand **greater** than **total** employment. Can the part be 30% greater than the whole? And, as the figures show for March to April 1989, did nonfarm employment really increase by 1,354 while total employment decreased by 430? In Duluth City, that kind of difference can't be accounted for by farming (cutting back in the Spring?) nor by the self-employed.

Table 1. **Changes in Duluth's total employment and nonfarm payroll employment from month to month often not only differ in number of workers, but move in opposite directions.**

	Nonfarm Payroll Emp.	Total Emp.	Change: Month-Month Percent Nonfarm	Percent Total	Numeric Nonfarm	Numeric Total
1989						
Jan	47,861	36,388	-1.0	-0.1	-489	37
Feb	47,434	34,401	-0.9	-5.5	-427	-1,987
Mar	47,547	35,879	0.2	4.3	113	1,478
Apr	48,901	35,449	2.8	-1.2	1354	-430
May	49,363	36,091	0.9	1.8	462	642
Jun	49,380	26,260	0	0.5	17	169
Jul	49,403	36,790	0	1.9	23	530
Aug	49,403	37,236	0	1.2	0	446
Sep	49,141	37,462	-0.5	0.6	-262	226
Oct	49,697	37,711	1.1	0.7	556	249
Nov	49,989	38,293	0.6	1.5	292	582
Dec	49,761	37,709	-0.5	-1.5	-228	-584
1990						
Jan	49,203	37,909	-1.1	0.5	-558	200
Feb	49,040	37,633	-0.3	-0.7	-163	-276
Mar	49,057	37,350	0	-0.8	17	-283
Apr	49,038	36,651	0	-1.9	-19	-699
May	49,562	37,251	1.1	1.6	524	600
Jun	50,385	37,828	1.7	1.5	823	577
Jul	49,859	38,433	-1.0	1.6	-526	605
Aug	50,180	38,686	0.6	0.7	321	253
Sep	50,362	38,008	0.4	-1.8	182	-687

Differences between the two employment series in other MSAs are not that dramatic, but they certainly are inconsistent. The two series are nearly at the same level in the Twin Cities; in the St. Cloud MSA total employment runs about 23% above nonfarm employment; Rochester MSA's total employment runs a scant 3% above nonfarm employment.

Given that nonfarm payroll employment is about 90% of total employment in Minnesota depending upon the season, and as logic would suggest, should control about 90% of the changes in total employment, why are these relationships all over the place? Why can't the two series get their stories together?

Minnesota is not the only state with readers asking these questions. In every state, and even at the national level, these discrepancies occur. The Bureau of Labor Statistics has published a number of papers addressing the problem, but

few of them find their way into the hands of the public unless they read from periodicals such as the *Monthly Labor Review*.

For those readers who are still scratching their heads trying to figure out whether an area's economy improved or got worse when one set of figures says there were more jobs and another says there were fewer workers, we'll try to explain it. But don't start cheering yet. The reasons are intricate, and therefore, tough to explain. Hopefully though, you will better understand what the two employment series represent, and why they don't have to agree.

It all has to do with what the two series measure, how the data is collected, and how total employment is estimated. Pay attention now, here it comes.

How Employment Data Is Collected

There are two approaches to estimating employment. One is to ask a sample of household members about who is working: where they work, what kind of work they do, if they were looking for work, and so on. That's how the Census Bureau conducts their Current Population Survey (CPS) each month for the Department of Labor.

The resultant estimates of employment and unemployment are used to identify and fund troubled areas for various economic development programs such as job training.

The other way to estimate employment is to ask a sample of employers about their workers: how many there are, at what jobs, at what wages, for how many hours, and so on. That's how nonfarm payroll employment is estimated. It turns out that "household" surveys can tell one story, and "establishment" surveys can tell another.

If you think about it for a minute, you can see why.

Household surveys count employment where workers **live**; establishment surveys record employment at the place of **work**. If you live in one place and work in another, the two surveys could record you in different places depending on the definition of the areas. This is the primary reason Duluth's payroll employment is larger than total employment.

What The Two Series Measure

That brings us to the concept of "jobs" and "workers". The terms are not interchangable. Each views employment from a different angle. This is important, because it is the second reason the two employment series can disagree.

Because household surveys count people, not jobs, if you hold two or more jobs, you will be counted as one employed worker. Each employer you work for, however, will report you as an employee. Given that 6.2% of all workers hold more than one job, and that the trend is upward, a count of jobs will differ significantly from a count of workers.

The **household based** CPS, which measures total employment, includes all employed people who work at least one hour for pay during the survey week or at least 15 unpaid hours in a family business. It therefore includes the self-employed as well as those who work for a paycheck. It includes agricultural workers and even those with a job but on an unpaid absence.

By definition, **nonfarm payroll employment** excludes certain kinds of workers. Obviously, it excludes most agricultural workers, although it does include those employed in agricultural industries such as landscaping and veterinary services, as well as payroll jobs in forestry and fisheries. Also excluded are the self-employed, unpaid family and private household workers.

How Nonfarm Payroll Employment Is Estimated

Nonfarm payroll employment estimates for Minnesota and its MSAs are derived from a monthly sample of 6,250 employers throughout the state. This survey is a cooperative effort between the Research Office and the Bureau of Labor Statistics known as the

Current Employment Statistics program (CES). These firms employ about 30% of the state's salaried workers. A sample of employers volunteer information on how many workers they employed during the week including the 12th of the month. Some employers report the number of female workers, total hours, and number of production or supervisory workers.

Generally, about half of the sampled employers respond in time to be included in the next month's estimate. As stragglers' reports arrive, these preliminary estimates are revised. The series is benchmarked each year to payroll counts mandatorily submitted by almost all nonfarm employers.

How Total Employment Is Estimated

Ideally, Minnesota's labor force data (total employment and unemployment estimates) would be produced from the state's proportion of the national household-based CPS. Labor force estimates for the nation and the 11 largest states are produced this way, but the problem for smaller states like Minnesota is that their portions of the national survey (about 800 households in Minnesota) are too small to produce reliable estimates. Taking that reasoning further, realistic estimates for counties and metro areas would be totally out of the question.

Monthly estimates of total employment for Minnesota are developed here in the Research and Statistics Office from a regression-type methodology known as the variable coefficient model. The model synthesizes data from several sources (e.g. the CES and the CPS) to form a hybrid estimate which effectively dampens random sampling swings inherent in the CPS. At the end of a calendar year, the monthly model estimates are fine-tuned in a manner that makes the 12-month average of the model estimates equal the CPS annual average. The calendar year average of the CPS estimates is considered reliable because many of the random up and down swings tend to be cancelled out.

Below the state level (e.g. counties), employment estimates are built up using employer records of employment which are projected to the current month being estimated. That accounts for most payroll jobs. Self-employed, farm workers and other small groups of workers are estimated using techniques which rely on Census data and change factors derived from national or regional sources. The sum of the estimates for all the state's geographic areas are then compared to the model's figures and adjusted proportionally so the sum of the parts is equal to the whole. Finally, at the end of the year this process is repeated to benchmark area estimates to the CPS annual average revised figure.

Because the model accepts the CPS annual average as the answer, everything--including seasonality--becomes subordinate to it. Consequently, monthly changes in total job level are probably distorted at times.

Which brings us back to Duluth. It's difficult to estimate employment for Duluth because total employment estimates for MSAs such as Duluth-Superior are calculated as a unit. Cities are subsequently broken out, as are counties--e.g. Benton, Stearns and Sherburne Counties from the St. Cloud MSA. Since the total employment estimates already include the influences of the establishment survey (CES), MSA s are split on the basis of population because, remember, total employment is **residence** based.

This approach has inherent difficulties. A layoff, for example of 1,000 workers living and working in Superior, Wisconsin, would drop the job level there by 1,000, but the methodology doesn't provide any way to prevent Duluth from being assigned a portion of that job loss. The factors used to divide up jobs among component areas are static from month to month.

Which Series Tells The More Accurate Story?

Even at the national level the two series can disagree. Labor Department economist Paul O. Flaim thinks that one reason for the generally widening gap between the two U.S. series is that the household sample tends to understate job growth and that the payroll survey tends to overestimate employment growth because it counts jobs, not

employed people. National-level data suggests that the multiple job holding picked up on payroll counts caused about two-thirds of the divergence in the two series since 1985.

Wayne Graner, the Research and Statistics analyst who develops Minnesota's labor force data, says that "the nonfarm payroll series can have quite different seasonal patterns which can cause big differences in the two series for a particular month. Although some of the difference is real, it pales compared to the random sampling error in the household data."

"The State CPS sample is small," Graner adds, "plus about one-third of the households are dropped and replaced each month. This can cause big sampling errors. The State establishment survey, conversely, is relatively large and pretty much has the same firms reporting over time. Thus, the CES survey has much more built-in comparability from one month to the next. And that is probably the biggest factor in causing changes in the two employment series to disagree."

What are we left with from all this?

We have partial employment that can exceed the total. But we can explain much of that away by commuting and multiple job holding in the MSAs, except perhaps, in Duluth where it requires a Beamonesque leap of faith.

We have a total employment series, 90% of which reflects nonfarm payroll jobs, that can increase or decrease over the month while the nonfarm payroll series itself moves significantly to the contrary. That can be somewhat accounted for by an agricultural component that moves independently of nonfarm payroll employment. But, as you now know, the overwhelming reasons are, 1) the two series do not measure the same thing--one representing workers by residence, the other, jobs by place of work, and 2), the methodology for estimating monthly total employment subjects the data to annoying CPS errors associated with Minnesota's small share of the national sample.

The people here in the R & S Office who compile and work with the two series would say, "Put your money on the nonfarm payroll data." That's not to say that current payroll data is flawless. Current payroll estimates have their own sampling deficiencies.

Mercifully, we are left with the realization that owing to all the definitional and sampling differences, the nonfarm payroll series **shouldn't** be expected to parallel household-based total employment trends. But, if the total employment series were more accurate, the two series would agree much more than they do. Unfortunately, Minnesota's CPS sample is too small for that.

Most analysts at the state level, and many in the labor department, are not happy with the labor force estimates for states and smaller areas. But to get appreciably better data would require huge state and area samples and would take more money than it would be worth.

So you pays your money and you takes your chances. If you are smart, you'll remember what each series is meant to measure, and you'll view each series over time to ferret out real trends that emerge. It's not like you can look up the answer in the back of the book.

By Ron Daws

Table 2. **Between 1986 and 1989, Minnesota's nonfarm payroll employment rose 197,000 (10.4%) while total employment rose 130,000 (6.2%). If accurate, the difference would have to come from farming, the self-employed, unpaid family workers, private household workers, dual job holders and commuters.**

	Nonfarm Payroll Employment (In thousands)	Total Employment (In thousands)	Change: Month to Month			
			Percent		Numeric	
			Nonfarm	Total	Nonfarm	Total
1980	1770.3	1985.0	-	-	-	-
1981	1761.3	2035.0	-0.5	2.5	-8.9	50.0
1982	1707.3	1998.0	-3.1	-1.8	-54.0	-37.0
1983	1718.2	1998.0	0.6	0	10.9	0
1984	1819.8	2086.0	5.9	4.4	101.6	88.0
1985	1865.4	2091.0	2.5	0.2	45.6	5.0
1986	1893.9	2111.0	1.5	1.0	28.5	20.0
1987	1962.5	2139.0	3.6	1.3	68.6	28.0
1988	2028.0	2233.0	3.6	4.4	134.1	94.0
1989	2091.2	2241.0	3.1	0.4	63.2	8.0

The Nation

By Don Hilber

Recession More Likely as Number of Jobs Keeps Dropping

In October there were 68,000 fewer nonfarm wage and salary jobs in the United States than during the previous month. It was the fourth straight month that the number of jobs declined. While the evidence is only suggestive, it looks like a string of decreases typically associated with recessions. A downturn in the economy can't be fully determined until at least spring, when first quarter 1991 production figures are known. Through September of this year, Gross National Product (GNP) was still growing.

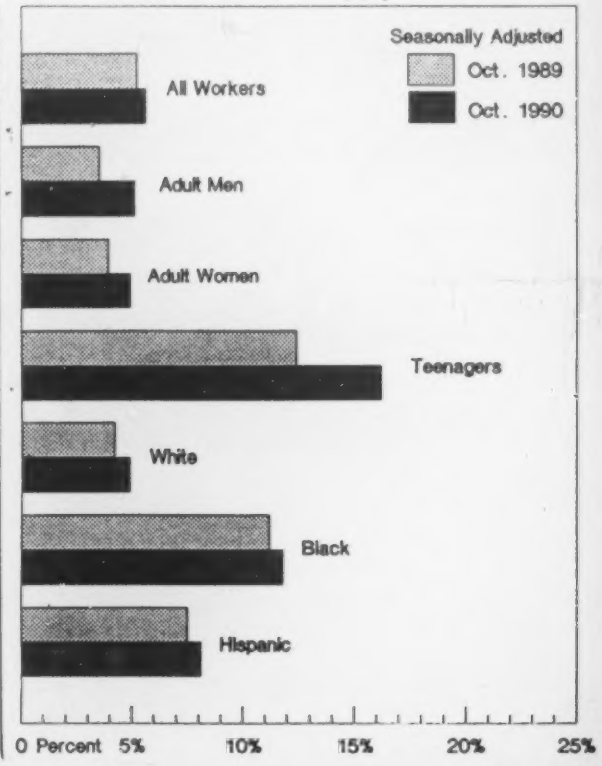
The drop in jobs can no longer be attributed to the release of temporary Census workers. More industries each month join the ranks of those using fewer employees. All of construction, most manufacturing and the largest industries in trade have now experienced repeated months of employment declines. The number of jobs in financial and business services are stable, while health services and local education remain the industries of strength.

Fewer jobs mean reduced incomes. Combined with lower consumer confidence in the wake of the Gulf crisis, the federal budget debacle and sluggish property values, this leads to fewer sales and less spending. Consequently, companies pare their workforces. Layoffs have already started to rise at a pace similar to the onset of previous recessions. While the unemployment rate for October remained constant at 5.7%, it still is up from June's 5.2%.

U. S. and Twin Cities Consumer Price Index

	UNITED STATES				TWIN CITIES			
DATE	CPI-W	% CHNG YR AGO	CPI-U	% CHNG YR AGO	CPI-W	% CHNG YR AGO	CPI-U	% CHNG YR AGO
1988								
A.A.	117.0	4.0	118.3	4.1	115.5	5.2	117.2	5.0
1989								
Jan	119.7	4.5	121.1	4.7	(1st		(1st	
Feb	120.2	4.8	121.6	4.8	Half		Half	
Mar	120.8	5.0	122.3	5.0	Av.)		Av.)	
Apr	121.8	5.3	123.1	5.1	118.3	3.7	120.3	4.0
May	122.5	5.4	123.8	5.4				
Jun	122.8	5.2	124.1	5.2				
Jul	123.2	5.1	124.4	5.0				
Aug	123.2	4.7	124.6	4.7	(2nd		(2nd	
Sep	123.6	4.3	125.0	4.3	Half		Half	
Oct	124.2	4.5	125.6	4.5	Av.)		Av.)	
Nov	124.4	4.5	125.9	4.7	121.8	4.2	123.8	4.4
Dec	124.6	4.5	126.1	4.6				
A.A.	122.6	4.8	124.0	4.8	120.1	4.0	122.0	4.1
1990								
Jan	125.9	5.2	127.4	5.2	(1st		(1st	
Feb	126.4	5.2	128.0	5.3	Half		Half	
Mar	127.1	5.2	128.7	5.2	Av.)		Av.)	
Apr	127.3	4.5	128.9	4.7	123.1	4.1	125.5	4.3
May	127.5	4.1	129.2	4.4				
Jun	128.3	4.5	129.9	4.7				
Jul	128.7	4.5	130.4	4.8				
Aug	129.9	5.4	131.6	5.6				
Sept	131.1	6.1	132.7	6.2				
Oct	131.9	6.2	133.5	6.3				

U.S. Unemployment Rates by Age & Sex



Minnesota

Unlike Nation, Job Growth in Minnesota Continues

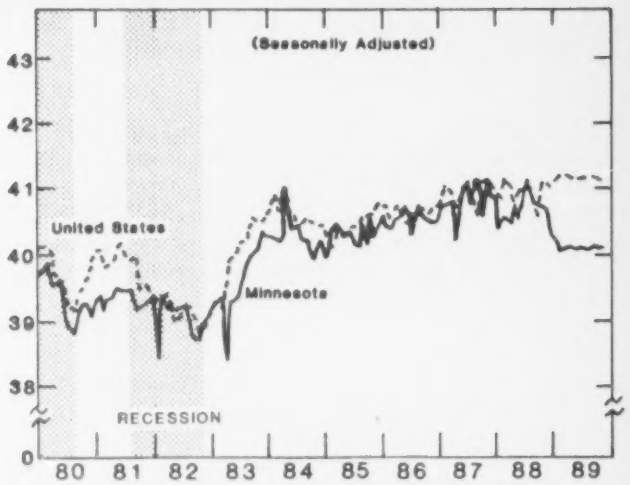
Job growth this fall has not been robust, but at least it has been growing. While the number of jobs in the U.S. dropped during the last four months, they rose substantially in Minnesota from September to October to reach a new seasonally-adjusted high. Nintey percent of the gain over the month and all of it in the past year, however, was in the service-producing sector. Employment has been rising erratically in trade and financial services, steadily in business, consumer and health services, and rapidly in local government education.

Jobs are growing at a pace that keeps unemployment from rising substantially, as in other states. The unemployment rate stood at 4.2% in October, a seasonally-typical drop from September's 4.5%, yet higher than the 3.8% in October 1989. The unemployment rate may be edging upward ever so slightly, having been higher than the year-ago figure in each of the last four months.

Average weekly initial claims for unemployment insurance have been running only minutely above year-ago tallies. Meanwhile, total number of weeks claimed has been rising two to three times faster than the total number of people claiming. This suggests longer spells of unemployment more than it does sharp increases in the number of layoffs. In general, Minnesota employers are not resorting to drastic job reduction measures, but are adding jobs ever so cautiously. New openings are not as plentiful.

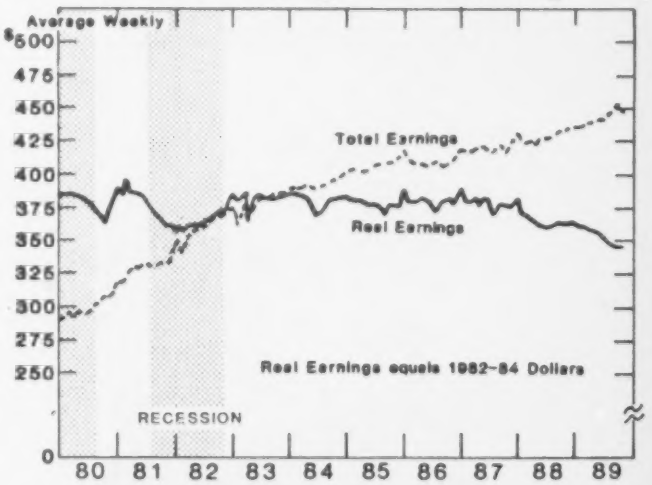
By Don Hilber

Average Weekly Hours, Manufacturing



Hours worked rise during prosperity, usually to 40 hours per week or more, and drop during recessions. Manufacturing hours are a leading indicator of economic health because employers increase hours before hiring additional workers. Manufacturing hours are generally more cyclically sensitive than hours worked in other industries.

Minnesota Earnings, Manufacturing

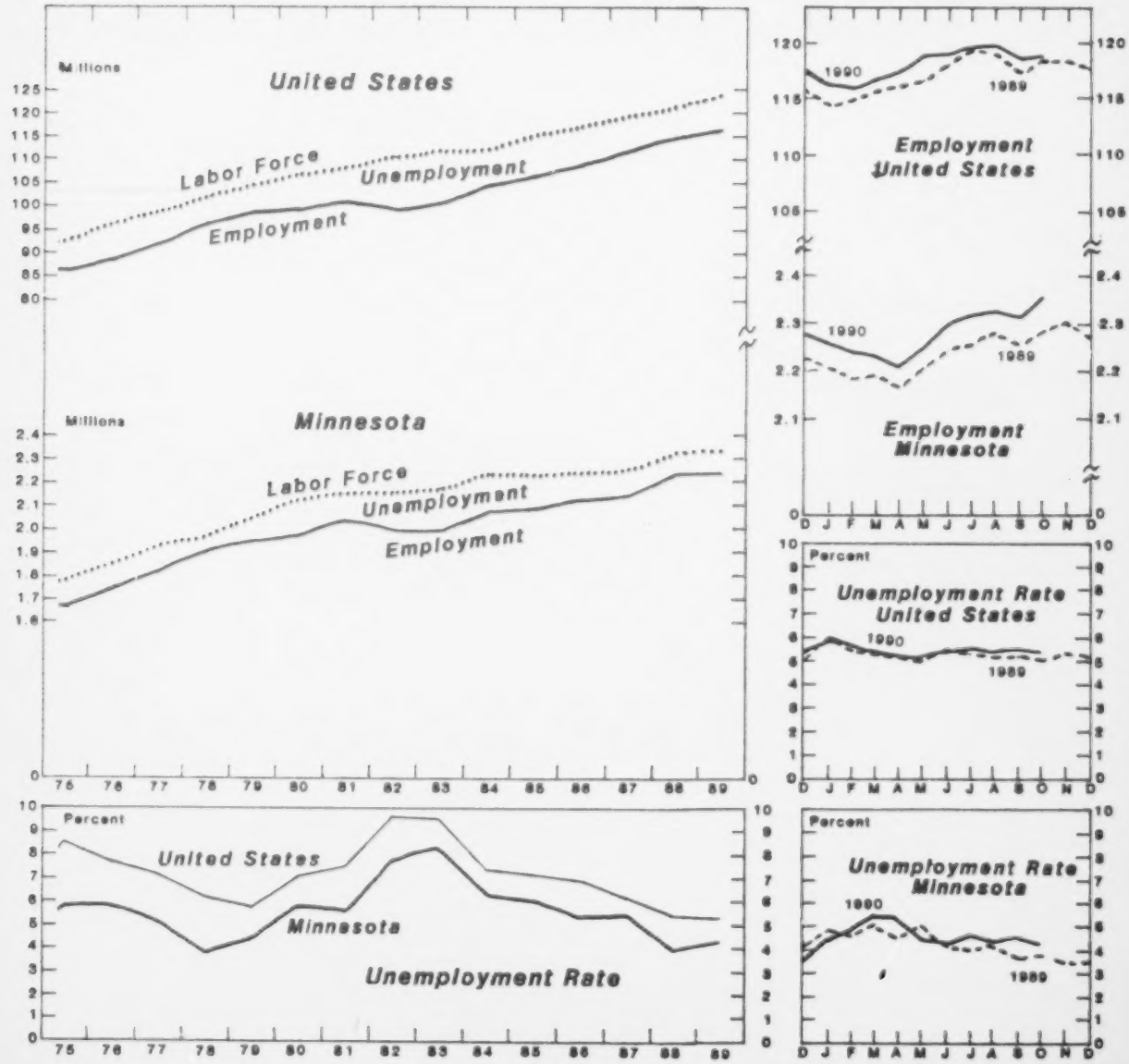


Total earnings are actual earnings. Real earnings are adjusted by the Twin Cities Consumer Price Index-U to gauge actual buying power in constant 1982-84 dollars. The graph shows, for example, that although total earnings have risen since 1982, purchasing power has remained roughly unchanged. Other industries would not necessarily display the same trend.

Labor Force Estimates

	Minnesota (In Thousands)			United States (In Thousands)		
	Oct 90	Sep 90	Oct 89	Oct 90	Sep 90	Oct 89
Labor Force	2,462.1	2,428.5	2,384.0	125,020	124,779	124,416
Employment	2,357.8	2,318.1	2,293.6	118,299	117,961	118,194
Unemployment	104.3	110.5	90.4	6,722	6,818	6,222
Act. Unemp. Rt.	4.2	4.5	3.8	5.4	5.5	5.0
S.A. Unemp. Rt.	-	-	-	5.7	5.7	5.3

U.S. And Minnesota Employment, Unemployment And Unemployment Rate



Minnesota Nonfarm Wage & Salary Employment, Hours & Earnings

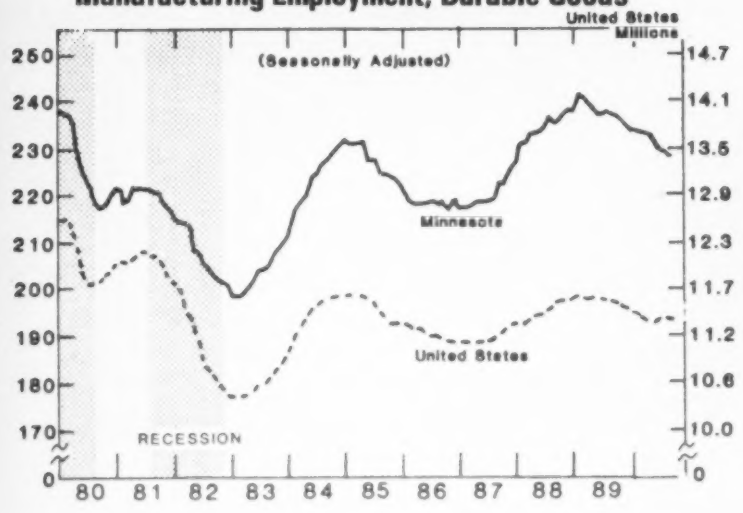
INDUSTRY	EMPLOYMENT 1/ (thousands)			PERCENT CHANGE FROM		PRODUCTION WORKERS' HOURS & EARNINGS 2/					
						Average Weekly Earnings		Average Weekly Hours		Average Hourly Earnings	
	Oct. 1990	Sep. 1990	Oct. 1989	Sep. 1990	Oct. 1989	Oct. 1990	Oct. 1989	Oct. 1990	Oct. 1989	Oct. 1990	Oct. 1989
Total Nonfarm Wage & Salary	2,167.9	2,153.1	2,132.5	0.7	1.7	-	-	-	-	-	-
Goods Producing	495.3	502.6	498.4	-1.5	-0.6	-	-	-	-	-	-
Mining	8.6	8.7	8.1	-1.3	6.2	645.32	597.92	44.2	43.9	14.60	13.62
Metal Mining	6.5	6.6	6.0	-0.7	8.4	666.43	610.53	43.7	43.3	15.25	14.10
Construction	89.0	90.7	88.8	-2.0	0.2	701.40	670.74	41.8	41.2	16.78	16.28
Manufacturing	397.7	403.1	401.5	-1.3	-0.9	454.66	453.17	40.2	40.9	11.31	11.08
Durable Goods	229.9	231.4	235.4	-0.6	-2.3	462.98	467.52	40.4	41.3	11.46	11.32
Lumber and Furniture	23.1	24.0	22.8	-3.9	1.1	484.07	490.64	37.7	37.8	12.84	12.98
Stone, Clay and Glass	9.3	9.4	9.6	-1.3	-3.5	514.61	477.48	42.6	42.9	12.08	11.13
Primary Metals	6.4	6.4	6.5	-1.1	-2.6	493.78	439.43	43.2	40.5	11.43	10.85
Fabricated Metals	34.3	34.4	35.3	-0.5	-2.8	480.98	481.32	40.9	42.0	11.76	11.46
Industrial Machinery	78.5	78.4	82.9	0.0	-5.3	479.59	497.70	40.2	42.0	11.93	11.85
Office and Computing	34.5	34.6	38.1	-0.4	-9.5	510.94	516.74	42.9	42.6	11.91	12.13
Electronic Equipment	28.6	28.5	28.1	0.1	1.8	397.55	398.55	40.9	41.3	9.72	9.65
Transportation Equipment	11.8	11.9	11.8	-1.0	0.2	445.56	482.05	39.5	42.1	11.28	11.45
Instruments and Related	32.2	32.3	32.7	-0.3	-1.6	448.86	445.63	41.6	42.2	10.79	10.56
Misc. Manufacturing	5.9	5.9	5.7	0.8	3.9	412.23	414.07	39.0	39.1	10.57	10.59
Nondurable Goods	167.8	171.8	166.1	-2.3	1.0	444.40	437.40	40.0	40.5	11.11	10.80
Food & Beverage Products	48.1	52.0	48.4	-7.5	-0.5	401.13	405.23	40.6	42.3	9.88	9.58
Textiles & Apparel	4.8	4.8	5.2	-1.7	-9.0	299.46	296.35	37.2	39.2	8.05	7.56
Paper Products	33.8	33.8	33.3	-0.3	1.2	560.42	560.58	42.2	42.5	13.28	13.19
Printing and Publishing	52.8	52.6	50.7	0.4	4.0	438.92	430.54	38.2	38.0	11.49	11.33
Chemicals and Petroleum	11.8	11.8	11.7	-0.6	0.5	531.96	511.25	40.3	40.9	13.20	12.50
Rubber and Plastic	16.6	16.6	16.7	-0.3	-0.8	392.80	377.45	40.0	39.4	9.82	9.56
Service Producing	1,672.6	1,650.5	1,634.1	1.3	2.4	-	-	-	-	-	-
Transp., Comm., & Util.	111.0	110.4	108.4	0.5	2.4	-	-	-	-	-	-
Transportation	76.6	75.6	73.2	1.2	4.6	-	-	-	-	-	-
Trucking & Warehousing	28.5	28.5	28.2	-0.2	0.9	446.78	432.50	35.6	34.6	12.55	12.50
Communication & Utilities	34.4	34.8	35.2	-1.0	-2.2	648.43	603.70	40.2	38.6	16.13	15.64
Trade	529.1	531.1	523.0	-0.4	1.2	243.14	240.13	29.4	29.5	8.27	8.14
Wholesale	130.6	130.8	128.1	-0.2	1.9	421.50	423.26	37.6	38.2	11.21	11.08
Retail	398.5	400.3	394.9	-0.4	0.9	189.65	186.57	26.9	27.0	7.05	6.91
Building Materials	18.6	18.6	18.7	0.2	-0.4	339.84	349.15	37.1	38.2	9.16	9.14
General Merchandise	60.2	58.8	60.5	2.3	-0.5	184.37	180.67	25.5	25.7	7.23	7.03
Food Stores	55.7	55.8	53.9	-0.1	3.3	196.10	190.40	26.9	27.2	7.29	7.00
Automotive	44.3	44.2	43.1	0.1	2.8	299.90	295.48	35.2	34.6	7.52	8.54
Apparel	20.1	20.2	20.3	-0.1	-0.9	299.48	280.80	36.3	35.1	8.25	8.00
Home Furnishings	16.7	16.5	16.7	1.0	-0.1	272.99	267.38	30.4	31.2	8.98	8.57
Eating and Drinking	131.8	135.7	130.8	-2.9	0.7	119.93	118.72	22.8	23.1	5.26	5.14
Fin., Insur., Real Estate	123.8	123.9	121.1	-0.1	2.2						
Finance	56.2	56.0	55.3	0.4	1.6						
Insurance	46.6	46.6	45.1	-0.1	3.3						
Real Estate	21.1	21.3	20.7	-1.1	1.5						
Services	565.6	564.3	547.4	0.2	3.3						
Personal Services	25.9	25.6	25.5	1.4	1.6						
Business Services	99.6	100.6	96.7	-1.0	3.0						
Repair Services	23.6	23.3	22.6	1.2	4.4						
Health Services	166.9	167.4	162.3	-0.3	2.9						
Nursing Homes	43.8	43.9	42.8	-0.4	2.2						
Hospitals	55.4	55.8	54.6	-0.6	1.6						
Legal Services	15.9	15.9	15.6	0.3	2.2						
Private Education	32.9	27.1	32.8	21.6	0.3						
Government	343.2	320.9	334.2	7.0	2.7						
Federal	34.1	34.3	34.5	-0.5	-1.1						
State	86.2	77.6	84.5	11.1	2.0						
Education	49.0	40.3	48.0	21.5	2.1						
Local	222.9	209.0	215.1	6.6	3.6						
Education	120.1	103.7	115.0	15.9	4.5						

Note: Not all industry sub-groups are shown for every major industry category.

1/ Totals may not add because of rounding.

2/ Average earnings data are on a "gross" basis and are derived from reports of payroll for full-time and part-time production or non-supervisory workers. The payroll is reported before deductions of any kind. Bonuses, retroactive pay, tips, payment in kind, and "fringe benefits" are excluded.

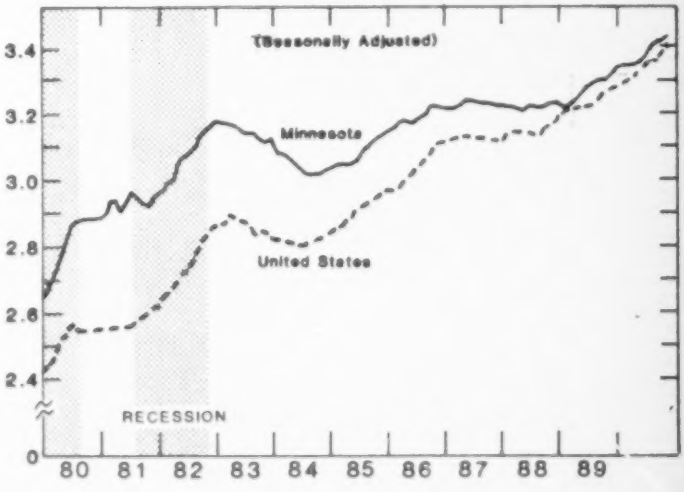
Manufacturing Employment, Durable Goods



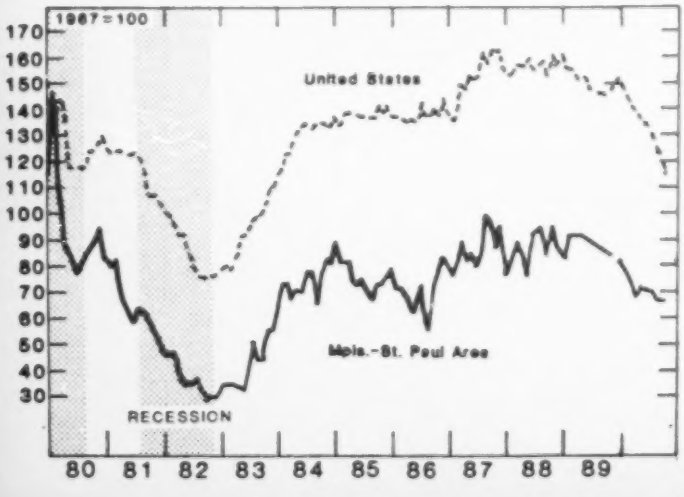
Measures level and compares rate of change from month to month. Rising number of durable-goods producing jobs reflects current and anticipated demand for big ticket products such as cars, appliances, electronics and housing. Increased durable goods producing jobs is an indicator of prosperity--low unemployment and high wages. It can, however, also reflect buying now in anticipation of rising prices.

Ratio of Services to Goods Producing Jobs

Relative number of service-producing to goods-producing jobs. The general trend is upward and accelerates during recessions when goods-producing jobs decline. The chart shows, for example, that during 1980 there were roughly 35 goods-producing jobs for every 100 service-producing jobs. By 1988 the ratio had dropped to about 30 goods-producing jobs for every 100 service-producing jobs. While Minnesota's ratio is higher, the nation is catching up.



Conference Board Help Wanted Index



Measures employers' demand for labor. Based on daily volume of help wanted ads in one newspaper in each of 51 cities. Reflects relative level and monthly change in the number of job openings resulting from vacancies in existing jobs, or the creation of new jobs. Adjusted for seasonal variation, number of Sundays, and days in the month.

Insured Unemployment Claimaints

SELECTED MINNESOTA PROGRAM STATISTICS

Distribution of Insured Unemployed by Industry and Occupation, October 1990

Industry Attachment	Number	Percent of Total	Percent*/ Long-Term Unemployed	Women as Percent of total
TOTAL, ALL INDUSTRIES	25,956	100.0	29.4	38.7
Ag., For., Fish.	243	0.9	14.8	31.0
Mining	81	0.3	45.1	31.0
Construction	3,195	12.3	15.0	7.3
Manufacturing	7,542	29.1	29.6	34.8
Public Utilities	1,218	4.7	28.0	31.9
Wholesale Trade	2,128	8.2	34.8	33.2
Retail Trade	3,326	12.8	33.3	46.4
Fin., Ins., Re. Est.	1,275	4.9	39.4	59.8
Services	5,189	20.0	32.8	57.2
Public Admin.	762	2.9	21.9	43.9
Info. Not Available	997	3.8	28.6	38.0
Occupational Attachment				
TOTAL, ALL OCCUPATIONS	25,956	100.0	29.4	38.7
Prof., Tech., Mgr.	6,596	25.4	37.7	40.4
Clerical	3,938	15.2	32.8	80.5
Sales	1,598	6.2	33.1	34.7
Services	1,653	6.4	29.0	57.4
Farm, For., Fish.	210	0.8	11.9	23.9
Processing	730	2.8	35.4	26.4
Machine Trades	1,691	6.5	24.0	13.7
Benchwork	2,520	9.7	21.6	52.8
Structural Work	3,938	15.2	16.6	4.5
Misc., & INA	3,082	11.9	31.3	22.1

Distribution of Insured Unemployed by Age and Sex, October 1990

Age Groups	Number	Percent Distribution		
		Men of Totals	Men of Men	Women of Women
TOTALS	25,956	61.5	100.0	100.0
Under 45	19,007	62.0	73.8	72.4
Under 25	2,906	62.1	11.3	11.0
25-34	9,031	62.9	35.6	33.5
35-44	7,070	60.7	26.9	27.8
45 and over	6,949	60.3	26.2	27.6
45-54	4,329	59.9	16.2	17.4
55 and over	2,620	61.0	10.0	10.2

Experienced Supply/Job Openings Demand**/

Applicants (Supply) Oct. 1990	Job Openings (Demand) Oct. 1990	Supply/Demand Ratio	
		Oct. 1990	Oct. 1989
53,222	23,527	2.3	2.4
15,519	1,969	7.9	5.8
9,959	3,416	2.9	3.0
3,674	3,225	1.1	1.3
5,095	5,894	0.9	0.8
668	479	1.4	0.9
1,200	2,041	0.6	0.9
3,241	752	4.3	4.1
2,887	1,464	2.0	2.7
5,315	1,582	3.4	4.8
5,957	2,705	2.2	3.2

*/ Long-term unemployed refers to unemployment insurance claimants whose current spell of unemployment has lasted 15 weeks or longer.

**/ Inexperienced and improperly coded job applicants are not included in this table.

Forecasts of Real GNP and Minnesota Employment

Forecasts of both the national economy (RGNP) and Minnesota nonfarm wage and salary employment (MN employment) continue to show growth, but at ever slowing rates.

Over the next 24 months, we expect RGNP to grow 1.7% per year and MN employment to grow at a yearly rate of 2.3% .

Over the next two 12 month periods, RGNP is forecasted to grow at 1.9% over the first year, and 1.5% over the second. MN employment will grow at 2.2% and 2.4% over the same periods.

The table gives the actual values for 1990:3. Values for other periods are the forecasts. There is a probability distribution surrounding these. For example, the one standard deviations for RGNP increase from $ 42.5 for 1990:4 to $ 120.8 billion for 1992.4. This means, for 1990:4 for example, that there is a 66% probability that the range 4149.46 to 4234.46 will contain the true value.

Those for MN employment increase from 16.5 to 47.8 thousand. Thus recession odds are about 40%.

Year:Qtr	Real GNP (Seasonally Adj Billions)	MN Employment (Not S.A. Thousands)
1990:3	4173.10	2143.21
1990:4	4191.96	2163.77
1991:1	4213.09	2129.87
1991:2	4233.35	2187.54
1991:3	4253.00	2186.79
1991:4	4270.50	2210.61
1992:1	4287.40	2178.22
1992:2	4303.94	2238.21
1992:3	4320.34	2239.66
1992:4	4335.57	2262.80

One period ahead errors for 1990:3 were 0.45% for MN employment and 0.04% for RGNP.

By Charles Cline

Metropolitan Areas

Minneapolis–St. Paul MSA

Unemployment Rate Drops Seasonally

The unemployment rate in the Minneapolis - St. Paul metropolitan area declined to 4.1% in October, a drop of 0.3 of a percentage point from September. The average September to October change over the past decade was a decrease of 0.4 of a percentage point.

Employment, as measured both by number of employed workers and nonfarm payroll jobs, showed more strength in October than in the previous five months. The total number of employed Twin Cities residents increased by 1.9% in October, higher than the 10 year average of 1.5%. It was also substantially higher than the national employment growth rate of 0.3%.

Nonfarm payroll jobs showed an increase after adjustments for seasonal factors. One pleasant development was some moderation of job loss in the goods-producing sector which had declined sharply the last six months. The number of construction jobs remained the same after falling in five of the last six months. There were fewer jobs in the cyclically-sensitive durable goods sector, but nondurable goods producers added workers. An additional sign of economic slowdown in the manufacturing sector is the shorter workweek for production workers, 40.2 hours this year compared to 41.0 last year.

Jobs in the service-producing sector also rebounded in October, thanks mostly to growth in educational services employment. Nearly all major industry categories showed job increases. The exceptions were wholesale trade and communications/utilities.

By Bruce Steuernagel

LABOR FORCE DATA

	Employment			Unemployment			Unemp. Rate		
	Oct. 1990	Sep. 1990	Oct. 1989	Oct. 1990	Sep. 1990	Oct. 1989	Oct. 1990	Sep. 1990	Oct. 1989
Mpls-St. Paul	1,399,022	1,372,495	1,368,204	59,656	63,567	51,126	4.1	4.4	3.6
REGION 11	1,313,479	1,288,179	1,283,829	55,296	59,811	48,101	4.0	4.4	3.6
Anoka	135,085	132,483	132,036	6,503	7,008	5,468	4.6	5.0	4.0
Carver	25,170	24,686	24,602	981	1,049	845	3.8	4.1	3.3
Dakota	147,931	145,082	144,592	5,932	6,268	5,091	3.9	4.1	3.4
Hennepin	621,485	609,513	607,455	26,099	28,708	22,780	4.0	4.5	3.6
Ramsey	277,919	272,566	271,645	11,473	12,407	10,129	4.0	4.4	3.6
Scott	29,759	29,186	29,088	1,177	1,309	1,203	3.8	4.3	4.0
Washington	76,130	74,663	74,411	3,131	3,062	2,585	4.0	3.9	3.4
Chisago	14,522	14,243	14,195	880	830	621	5.7	5.5	4.2
Isanti	12,297	12,060	12,019	676	682	550	5.2	5.4	4.4
Wright	33,634	32,986	32,875	1,697	1,649	1,224	4.8	4.8	3.6
St. Croix, WI	25,089	25,028	25,287	1,105	597	629	4.2	2.3	2.4
Bloomington	58,264	57,142	56,949	2,347	2,690	2,089	3.9	4.5	3.5
Minneapolis	204,953	201,005	200,327	9,691	10,788	8,532	4.5	5.1	4.1
St. Paul	143,295	140,535	140,060	7,042	7,552	6,142	4.7	5.1	4.2

Mpls.–St. Paul Nonfarm Wage & Salary Employment, Hours & Earnings

INDUSTRY	EMPLOYMENT 1/ (thousands)			PERCENT CHANGE FROM		PRODUCTION WORKERS' HOURS & EARNINGS 2/					
						Average Weekly Earnings		Average Weekly Hours		Average Hourly Earnings	
	Oct. 1990	Sep. 1990	Oct. 1989	Sep. 1990	Oct. 1989	Oct. 1990	Oct. 1989	Oct. 1990	Oct. 1989	Oct. 1990	Oct. 1989
Total Nonfarm Wage & Salary	1,397.1	1,385.1	1,375.4	0.9	1.6	-	-	-	-	-	-
Goods Producing	316.0	318.2	320.7	-0.7	-1.5	-	-	-	-	-	-
Mining	0.5	0.5	0.6	0.8	-25.6	797.74	692.29	47.4	45.1	16.83	15.35
Construction	55.8	56.9	56.2	-2.0	-0.7	761.38	710.80	41.2	40.0	18.48	17.77
Manufacturing	259.7	260.8	263.8	-0.4	-1.6	482.00	477.65	40.2	41.0	11.99	11.65
Durable Goods	155.5	156.3	161.1	-0.6	-3.5	489.65	486.45	40.4	41.4	12.12	11.75
Lumber and Furniture	9.2	10.1	9.3	-8.6	-1.1	545.20	551.31	37.6	38.1	14.50	14.47
Stone, Clay and Glass	3.3	3.3	3.3	-0.9	0.0	549.88	492.85	41.5	40.9	13.25	12.05
Primary Metals	4.6	4.6	4.6	-0.6	-1.2	505.29	412.89	43.9	40.4	11.51	10.22
Fabricated Metals	25.7	25.7	26.7	0.0	-3.7	501.40	482.86	41.2	41.2	12.17	11.72
Industrial Machinery	55.7	55.6	60.2	0.1	-7.6	506.39	536.92	39.5	43.3	12.82	12.40
Office and Computing	22.9	23.0	26.8	-0.4	-14.7	565.51	616.79	40.1	47.3	14.11	13.04
Electronic Equipment	18.2	18.0	17.8	0.8	2.1	405.78	378.67	39.9	39.2	10.17	9.66
Transportation Equipment	5.6	5.7	5.6	-2.1	-0.7	590.85	599.07	39.0	38.8	15.15	15.44
Instruments and Related	29.4	29.4	29.7	-0.1	-1.3	466.99	467.75	42.3	42.6	11.04	10.98
Misc. Manufacturing	3.9	3.9	3.7	-0.1	4.0	471.98	448.80	40.1	40.0	11.77	11.22
Nondurable Goods	104.2	104.4	102.7	-0.2	1.4	471.22	464.26	39.9	40.3	11.81	11.52
Food & Beverage Products	17.3	17.5	17.4	-1.1	-0.6	521.89	487.34	43.6	42.9	11.97	11.36
Paper Products	25.9	25.9	25.6	-0.2	1.0	494.06	503.36	40.2	41.6	12.29	12.10
Printing and Publishing	37.6	37.5	36.0	0.2	4.4	441.88	449.64	37.8	38.3	11.69	11.74
Chemicals and Petroleum	10.2	10.2	9.8	-0.1	4.1	579.56	569.16	40.5	40.8	14.31	13.95
Rubber and Plastic	11.3	11.3	11.4	-0.2	-1.2	406.40	397.76	40.0	40.3	10.16	9.87
Service Producing	1,081.1	1,066.9	1,054.8	1.3	2.5	-	-	-	-	-	-
Transp., Comm., & Util.	79.1	79.2	76.1	-0.1	4.0	-	-	-	-	-	-
Transportation	57.5	57.3	54.0	0.4	6.6	-	-	-	-	-	-
Trucking & Warehousing	18.1	18.1	17.8	-0.3	1.4	427.39	393.98	32.6	30.9	13.11	12.75
Communication & Utilities	21.6	21.9	22.2	-1.3	-2.5	610.32	580.25	38.8	38.3	15.73	15.15
Trade	338.6	335.1	335.1	-0.2	1.0	273.27	270.00	29.8	30.0	9.17	9.00
Wholesale	88.8	89.3	87.2	-0.5	1.9	460.65	461.32	37.0	38.0	12.45	12.14
Retail	249.7	249.8	247.9	-0.0	0.7	213.95	208.51	27.5	27.4	7.78	7.61
Building Materials	10.5	10.4	10.8	0.9	-2.8	406.75	419.23	38.3	39.7	10.62	10.56
General Merchandise	42.8	41.9	43.4	2.3	-1.2	199.41	195.55	25.5	25.9	7.82	7.55
Food Stores	29.8	29.8	29.1	-0.1	2.3	270.52	250.56	29.5	28.9	9.17	8.67
Automotive	25.6	25.6	25.5	0.1	0.6	338.16	316.05	36.4	35.0	9.29	9.03
Apparel	13.7	13.7	13.5	-0.2	1.4	136.06	111.67	21.7	18.8	6.27	5.94
Home Furnishings	11.9	11.8	11.9	0.8	-0.1	319.40	292.20	30.8	30.0	10.37	9.74
Eating and Drinking	83.3	85.0	82.3	-2.0	1.1	133.40	135.51	23.2	23.9	5.75	5.67
Fin., Insur., Real Estate	95.2	95.2	93.1	0.2	2.2						
Finance	40.5	40.3	39.7	0.5	2.1						
Insurance	37.7	37.7	36.8	0.1	2.4						
Real Estate	16.9	17.0	16.6	-0.6	2.0						
Services	378.8	377.1	367.4	0.5	3.1						
Personal Services	18.5	18.3	18.4	1.2	0.6						
Business Services	84.1	84.9	82.6	-0.9	1.8						
Repair Services	17.6	17.6	17.1	0.4	2.8						
Health Services	95.4	95.1	91.4	0.2	4.3						
Nursing Homes	23.1	23.1	22.4	0.0	3.3						
Hospitals	33.3	33.3	32.1	0.1	3.8						
Legal Services	12.8	12.8	12.5	0.2	2.5						
Private Education	17.1	14.5	17.5	17.9	-2.0						
Government	189.4	176.5	183.0	7.3	3.5						
Federal	20.7	20.8	20.7	-0.1	0.0						
State	55.3	49.7	53.9	11.2	2.5						
Education	31.4	25.8	30.5	21.6	2.7						
Local	113.8	106.0	108.3	6.9	4.6						
Education	62.7	54.1	59.4	15.9	5.6						

Note: Not all industry sub-groups are shown for every major industry category.

1/ Totals may not add because of rounding.

2/ Average earnings data are on a "gross" basis and are derived from reports of payroll for full-time and part-time production or non-supervisory workers. The payroll is reported before deductions of any kind. Bonuses, retroactive pay, tips, payment in kind, and "fringe benefits" are excluded.

Central and Northwest Minnesota

LABOR FORCE DATA	Employment			Unemployment			Unemp. Rate		
	Oct. 1990	Sep. 1990	Oct. 1989	Oct. 1990	Sep. 1990	Oct. 1989	Oct. 1990	Sep. 1990	Oct. 1989
St. Cloud	102,608	99,427	96,601	4,784	5,125	3,826	4.5	4.9	3.8
REGION 1	43,592	41,720	41,714	2,314	2,515	1,871	5.0	5.7	4.3
Kittson	2,413	2,379	2,356	120	157	104	4.7	6.2	4.2
Marshall	4,702	4,498	4,610	371	404	332	7.3	8.2	6.7
Norman	3,469	3,326	3,573	155	167	123	4.3	4.8	3.3
Pennington	7,054	6,885	6,633	376	382	277	5.1	5.3	4.0
Polk	15,236	14,178	14,551	826	979	695	5.1	6.5	4.6
Red Lake	1,559	1,426	1,408	157	221	137	9.1	13.4	8.9
Roseau	9,159	9,028	8,583	309	205	203	3.3	2.2	2.3
REGION 2	31,500	31,554	29,865	1,989	1,775	1,593	5.9	5.3	5.1
Beltrami	16,892	16,486	15,898	869	840	732	4.9	4.8	4.4
Clearwater	3,161	3,262	3,199	283	316	289	8.2	8.8	8.3
Hubbard	7,226	7,592	6,652	606	422	377	7.7	5.3	5.4
Lake of Woods	1,928	1,944	1,843	88	46	68	4.4	2.3	3.6
Mahnomen	2,293	2,270	2,273	143	151	127	5.9	6.2	5.3
REGION 4	99,549	96,683	96,548	3,967	4,028	3,434	3.8	4.0	3.4
Becker	13,787	13,488	13,266	805	738	668	5.5	5.2	4.8
Clay	26,081	25,222	25,180	685	808	564	2.6	3.1	2.2
Douglas	15,390	14,951	15,315	676	663	567	4.2	4.2	3.6
Grant	2,970	2,837	2,843	136	131	104	4.4	4.4	3.5
Otter Tail	25,481	25,153	24,482	1,143	1,119	992	4.3	4.3	3.9
Pope	4,795	4,724	4,628	224	231	214	4.5	4.7	4.4
Stevens	5,331	4,929	5,333	106	121	127	1.9	2.4	2.3
Traverse	2,073	1,971	2,063	83	90	85	3.8	4.4	4.0
Wilkin	3,641	3,408	3,438	109	127	113	2.9	3.6	3.2
REGION 5	59,935	60,014	59,397	4,276	3,927	3,689	6.7	6.1	5.8
Cass	8,531	8,816	8,065	722	699	637	7.8	7.3	7.3
Crow Wing	22,015	22,254	21,930	1,194	1,136	1,220	5.1	4.9	5.3
Morrison	13,980	14,210	14,182	1,194	1,031	887	7.9	6.8	5.9
Todd	10,723	10,286	10,370	809	713	615	7.0	6.5	5.6
Wadena	4,686	4,448	4,850	357	348	330	7.1	7.3	6.4
REGION 6E	55,182	54,669	54,133	2,345	2,442	2,109	4.1	4.3	3.7
Kandiyohi	20,477	20,284	19,594	692	728	607	3.3	3.5	3.0
McLeod	17,103	17,144	17,100	768	719	624	4.3	4.0	3.5
Meeker	8,688	8,310	8,401	542	583	490	5.9	6.6	5.5
Renville	8,914	8,931	9,038	343	412	388	3.7	4.4	4.1
REGION 7E	52,289	51,593	51,381	3,237	3,245	2,649	5.8	5.9	4.9
Chisago	14,522	14,243	14,195	880	830	621	5.7	5.5	4.2
Isanti	12,297	12,060	12,019	676	682	550	5.2	5.4	4.4
Kanabec	5,518	5,276	5,855	475	517	431	7.9	8.9	6.9
Mille Lacs	9,800	9,686	9,624	489	482	450	4.8	4.7	4.5
Pine	10,152	10,328	9,688	717	734	597	6.6	6.6	5.8
REGION 7W	136,241	132,413	129,476	6,481	6,774	5,050	4.5	4.9	3.8
Benton	16,182	15,681	15,235	881	964	660	5.2	5.8	4.2
Sherburne	19,887	19,271	18,723	1,245	1,283	934	5.9	6.2	4.8
Stearns	66,538	64,475	62,643	2,658	2,878	2,232	3.8	4.3	3.4
Wright	33,634	32,986	32,875	1,697	1,649	1,224	4.8	4.8	3.6

ST. CLOUD MSA NONFARM WAGE & SALARY EMPLOYMENT	Employment			% Change From	
Industry	Oct. 1990	Sep. 1990	Oct. 1989	Month Ago	Year Ago
Total Nonfarm Wage & Salary	83,266	81,872	80,539	1.7	3.4
Goods Producing	19,858	19,876	19,336	-0.1	2.7
Construction & Mining	4,640	4,658	4,995	-0.4	-7.1
Manufacturing	15,218	15,218	14,341	0.0	6.1
Durable Goods	8,856	8,918	8,122	-0.7	9.0
Nondurable Goods	6,362	6,300	6,219	1.0	2.3
Service Producing	63,408	61,996	61,203	2.3	3.6
Transp, Comm., & Util.	3,858	3,870	3,847	-0.3	0.3
Trade	26,236	26,170	24,497	0.3	7.1
Wholesale	4,024	4,059	3,659	-0.9	10.0
Retail	22,212	22,111	20,838	0.5	6.6
Finan., Insur., & Real Estate	2,430	2,465	2,424	-1.4	0.2
Services	16,824	16,844	16,260	-0.1	3.5
Health	5,752	5,733	5,364	0.3	7.2
Other Services	11,072	11,111	10,896	-0.4	1.6
Government	14,060	12,647	14,175	11.2	-0.8

Unemployment Rates Rise Over the Year--And So Does Employment

Unemployment was more prevalent this October than a year ago across Central and Northwestern Minnesota. Over the month, unemployment trends were mixed. Employment, meanwhile, continued to rise over the year and month. In the St. Cloud MSA, employment again reached an all-time high at 102,608, 3,181 or 3.2% above September, and 6,007 or 6.2% above last October.

In the St. Cloud MSA, the unemployment rate dropped from 4.9% in September to 4.5% in October, but was above last October's 3.8%. This is the fourth consecutive month that the St. Cloud MSA's unemployment rate exceeded the year-ago level.

In October, the St.Cloud MSA employed more nonfarm payroll workers than it ever has--83,266. Last year there were 80,539 employed, and just five years ago, in October 1985, there were 64,848 (28.4% fewer). It shows that any economic slowdown has yet to stifle this area's ability to create jobs.

The 2,727 additional nonfarm payroll jobs over the year in the St. Cloud MSA were primarily attributable to retail trade (up 1,374), durable goods manufacturing (up 734), educational services (up 466), health services (up 388), and wholesale trade (up 365).

With some of St. Cloud's construction winding down or completed, there were about 350 fewer building jobs in the MSA than last October. Another 250 jobs were lost in local government.

October is usually the month with the highest employment. This year was no exception, with 1,394 more payroll jobs (up 1.7%) in the MSA than in September. Although retail trade generated 101 new jobs over the month, the biggest gainers were state and local government, up 487 and 919, respectively.

By Ron Daws

Unemployment Rates Change Little Over the Month and Year

Region 3's unemployment rate dropped slightly over the month, from 5.8% to 5.6%. Last October the region's rate was also 5.6%. Duluth's rate fell even further over the month, from 5.3% to 4.8%, but remained above last October's 4.6%. Nonetheless, 4.8% in October is quite low for Duluth. Total employment in Duluth and Region 3 increased both over the month and year.

Although the number of nonfarm payroll jobs in Duluth declined slightly over the month (from 50,355 to 49,995), they remained above last October's 49,697. Payroll jobs customarily peak in October, and the fact that they nearly did again this year is encouraging in the face of national warnings of an economic slowdown. Even manufacturing, which lost jobs since September, remained on par with October of last year.

Since September, construction jobs have thinned out--too early in the year to be seasonal. Construction jobs, at 1,719 this October, were considerably below last October's 1,930. They have, in fact, been running below year-ago levels for most of second-half 1990.

Transportation/communication/utilities and government each netted a modest number of jobs over the year, but it was health services that created the bulk of the new jobs. Although 242 health jobs were lost since September (down 4.0%), health services employed 196 more people (up 3.5%) than last October. Duluth's health services industry has been robust all year.

By Ron Dawa

DULUTH & DULUTH-SUPERIOR MSA NONFARM WAGE & SALARY EMPLOYMENT

Industry	DULUTH					DULUTH SUPERIOR				
	Employment			Percent Change		Employment			Percent Change	
	Oct. 1990	Sep. 1990	Oct. 1989	Month Ago	Year Ago	Oct. 1990	Sep. 1990	Oct. 1989	Month Ago	Year Ago
Total Nonfarm Wage & Salary	49,995	50,355	49,697	-0.7	0.6	97,111	97,160	97,561	-0.1	-0.5
Goods Producing	5,938	6,161	6,143	-3.6	-3.3	17,534	17,907	18,327	-2.1	-4.3
Mining	Small, combined with construction					5,593	5,636	5,443	-0.8	2.8
Construction	1,720	1,804	1,931	-4.7	-10.9	3,442	3,504	4,366	-1.8	-21.2
Manufacturing	4,218	4,357	4,212	-3.2	0.1	8,499	8,767	8,518	-3.1	-0.2
Durable Goods	1,777	1,910	1,712	-7.0	3.8	4,525	4,770	4,420	-5.1	2.4
Nondurable Goods	2,441	2,447	2,500	-0.2	-2.4	3,974	3,997	4,098	-0.6	-3.0
Service Producing	44,057	44,194	43,554	-0.3	1.2	79,577	79,253	79,234	0.4	0.4
Transp., Comm., & Util.	3,327	3,340	3,273	-0.4	1.6	5,952	5,970	5,970	-0.3	-0.3
Trade	12,270	12,158	12,327	0.9	-0.5	24,632	24,488	24,648	0.6	-0.1
Wholesale	1,842	1,822	1,800	1.1	2.3	3,922	3,900	3,877	0.6	1.2
Retail	10,428	10,336	10,527	0.9	-0.9	20,710	20,588	20,771	0.6	-0.3
Finan., Insur., & Real Estate	1,860	1,871	1,925	-0.6	-3.4	3,240	3,240	3,260	0.0	-0.6
Service	14,402	14,783	13,981	-2.6	3.0	24,017	24,448	23,786	-1.8	1.0
Health	5,807	6,049	5,611	-4.0	3.5	9,406	9,676	9,277	-2.8	1.4
Other Services	8,595	8,734	8,370	-1.6	2.7	14,611	14,772	14,509	-1.1	0.7
Government	12,198	12,042	12,048	1.3	1.2	21,736	21,107	21,570	3.0	0.8

LABOR FORCE DATA

	Employment			Unemployment			Unemp. Rate		
	Oct. 1990	Sep. 1990	Oct. 1989	Oct. 1990	Sep. 1990	Oct. 1989	Oct. 1990	Sep. 1990	Oct. 1989
REGION 3	141,055	140,621	134,532	8,360	8,705	8,017	5.6	5.8	5.6
Aitkin	5,220	5,229	4,946	380	362	377	6.8	6.5	7.1
Carlton	12,556	12,169	11,734	832	778	699	6.2	6.0	5.6
Cook	2,811	3,072	2,675	155	105	173	5.2	3.3	6.1
Itasca	16,877	16,461	16,254	1,362	1,403	1,396	7.5	7.9	7.9
Koochiching	9,627	10,813	8,283	660	697	357	6.4	6.1	4.1
Lake	4,886	4,854	3,777	311	305	292	6.0	5.9	7.2
St. Louis	89,078	88,023	86,863	4,660	5,055	4,723	5.0	5.4	5.2
City of Duluth	38,672	38,214	37,711	1,966	2,125	1,805	4.8	5.3	4.6
Balance St. Louis	50,406	49,809	49,152	2,694	2,930	2,918	5.1	5.6	5.6

Southern Minnesota

LABOR FORCE DATA	Employment			Unemployment			Unemp. Rate		
	Oct. 1990	Sep. 1990	Oct. 1989	Oct. 1990	Sep. 1990	Oct. 1989	Oct. 1990	Sep. 1990	Oct. 1989
REGION 6W	24,466	23,848	23,741	835	814	769	3.3	3.3	3.1
Big Stone	2,856	2,862	2,796	129	84	96	4.3	2.9	3.3
Chippewa	7,204	6,954	6,305	272	247	190	3.6	3.4	2.9
Lac Qui Parle	4,006	3,872	3,942	115	149	110	2.8	3.7	2.7
Swift	4,637	4,551	4,931	171	181	151	3.5	3.8	3.0
Yellow Medicine	5,713	5,609	5,767	148	153	222	2.5	2.7	3.7
REGION 8	61,790	60,502	59,897	2,156	2,654	2,263	3.4	4.2	3.6
Cottonwood	6,244	5,904	6,048	364	651	187	5.5	9.9	3.0
Jackson	5,590	5,402	5,364	228	275	195	3.9	4.8	3.5
Lincoln	3,193	3,142	3,168	115	102	141	3.5	3.1	4.3
Lyon	12,754	12,537	11,785	371	386	582	2.8	3.0	4.7
Murray	4,666	4,698	4,793	152	195	184	3.2	4.0	3.7
Nobles	12,320	12,102	11,362	374	378	259	2.9	3.0	2.2
Pipestone	4,866	4,855	5,251	237	305	344	4.6	5.9	6.1
Redwood	7,470	7,314	7,594	223	219	231	2.9	2.9	3.0
Rock	4,687	4,548	4,532	92	143	140	1.9	3.0	3.0
REGION 9	112,473	112,522	108,311	3,994	4,025	3,488	3.4	3.5	3.1
Blue Earth	28,983	27,736	28,335	675	862	733	2.3	3.0	2.5
Brown	13,909	14,042	13,529	426	382	391	3.0	2.6	2.8
Faribault	7,811	8,339	7,390	364	303	225	4.5	3.5	3.0
LeSueur	11,096	12,010	10,160	655	627	607	5.6	5.0	5.6
Martin	11,643	11,311	11,419	493	456	325	4.1	3.9	2.8
Nicollet	15,821	15,140	15,467	402	561	457	2.5	3.6	2.9
Sibley	7,228	7,723	6,798	325	279	262	4.3	3.5	3.7
Waseca	9,740	10,264	9,199	426	376	229	4.2	3.5	2.4
Watonwan	6,182	5,957	6,014	228	179	259	3.6	2.9	4.1
REGION 10	226,255	223,745	220,816	9,092	9,758	7,371	3.9	4.2	3.2
Dodge	8,569	8,436	8,241	443	400	324	4.9	4.5	3.8
Fillmore	9,602	9,454	9,760	348	334	384	3.5	3.4	3.8
Freeborn	15,179	14,915	16,556	1,688	1,714	677	10.0	10.3	3.9
Goodhue	21,924	21,622	20,816	881	951	693	3.9	4.2	3.2
Houston	10,174	9,847	9,479	207	273	261	2.0	2.7	2.7
Mower	18,400	17,962	16,606	659	732	516	3.5	3.9	3.0
Olmsted	63,046	62,555	61,950	1,773	2,158	1,808	2.7	3.3	2.8
Rice	28,335	27,997	26,736	1,030	1,019	1,136	3.5	3.5	2.8
Steele	16,563	16,632	15,597	597	722	377	3.5	3.5	4.1
Wabasha	8,424	8,539	8,940	424	382	376	4.8	4.3	4.0
Winona	26,039	25,786	26,135	1,042	1,073	819	3.8	4.0	3.0
Rochester City	39,224	38,919	38,542	1,281	1,579	1,319	3.2	3.9	3.3

ROCHESTER MSA NONFARM WAGE & SALARY EMPLOYMENT	Employment			% Change From	
Industry	Oct. 1990	Sep. 1990	Oct. 1989	Month Ago	Year Ago
Total Nonfarm Wage & Salary	65,148	65,456	64,716	-0.5	0.7
Goods Producing	14,336	14,550	14,709	-1.5	-2.5
Construction & Mining	2,435	2,437	2,672	-0.1	-8.9
Manufacturing	11,901	12,113	12,037	-1.8	-1.1
Durable Goods	9,863	9,942	10,027	-0.8	-1.6
Nondurable Goods	2,038	2,171	2,010	-6.1	1.4
Service Producing	50,812	50,906	50,007	-0.2	1.6
Transp. Comm., & Util.	1,888	1,885	1,924	0.2	-1.9
Trade	12,829	12,721	12,589	0.8	1.9
Wholesale	1,396	1,387	1,367	0.6	2.1
Retail	11,433	11,334	11,222	0.9	1.9
Finan., Insur., & Real Estate	1,684	1,693	1,619	-0.5	4.0
Services	28,003	28,463	27,449	-1.6	2.0
Health	18,530	18,826	18,351	-1.6	1.0
Other Services	9,473	9,637	9,098	-1.7	4.1
Government	6,408	6,144	6,426	4.3	-0.3

Unemployment Rates Remain Low In Southern Minnesota

Unemployment rates remained near last October's and generally were lower than September's. Southern Minnesota's unemployment rates seem to have been left unscathed by what three out of four economists are calling a national recession.

Employment, conversely, keeps rising--both over the month and year. In the Rochester MSA (Olmsted County), it rose 1,096 (1.8%) over the year, and 491 (0.8%) since September. Employment customarily rises in October as the unemployment rate slips. This year was no exception with the Rochester MSA's rate dropping to 2.7% from September's 3.3%. Last October the rate in the MSA was 2.8%. Only in 1988 when the MSA's October unemployment rate was 2.4% has it been lower in October during the 1980s.

Although the Rochester MSA's nonfarm payroll employment dropped a little since September, is was higher than October 1989's. The 308 net over-the-month decrease mostly came from manufact-uring (down 212), health services (down 296), and nonmedical services (down 164).

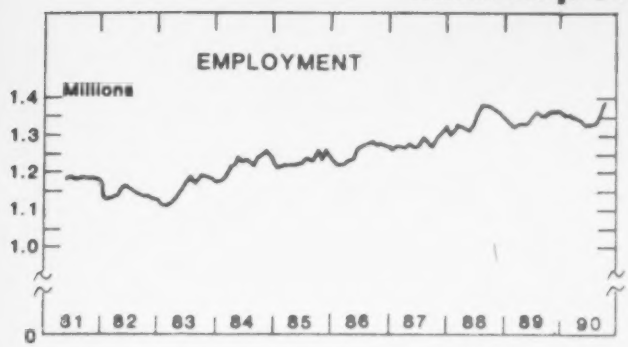
Obviously, some industries created jobs over the month. They were retail trade (up 99), and government (up 264).

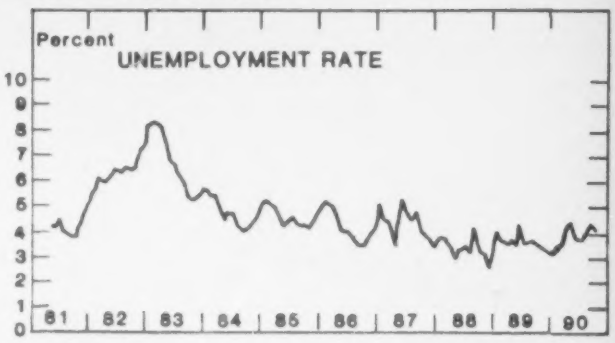
The 432 net job gain since October 1989 was mainly the result of 211 new retail trade jobs and 554 new service jobs canceling out losses in construction & mining (down 237) and durable goods (down 164).

By Ron Daws

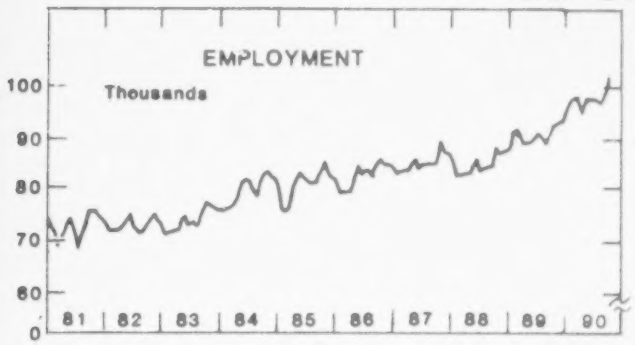
Employment and Unemployment Rates for MN Metro Areas

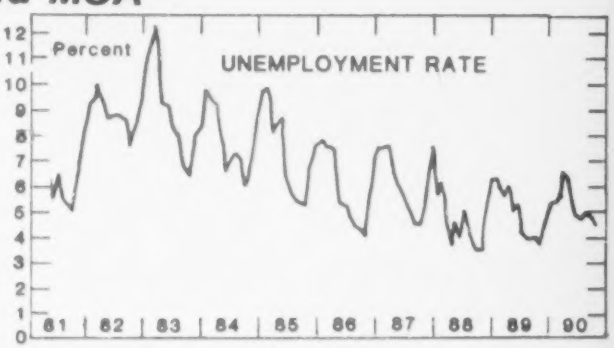
Minneapolis - St. Paul MSA



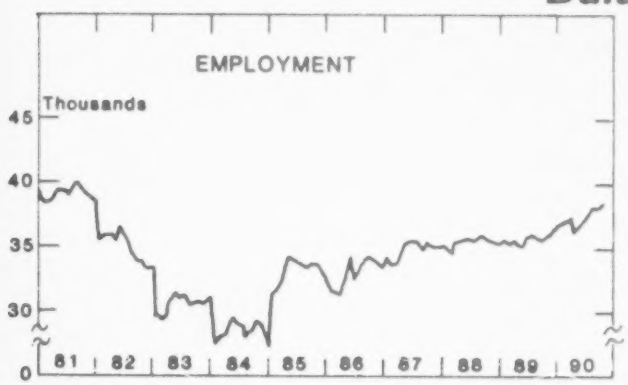


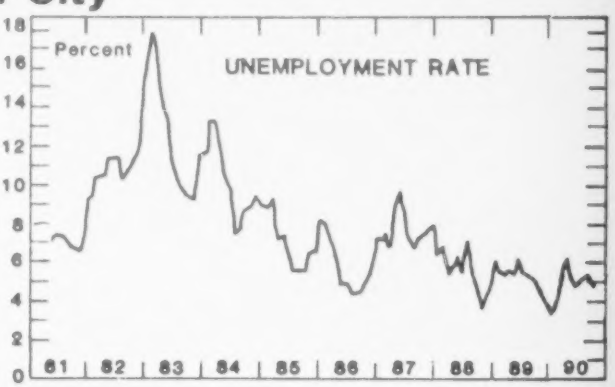
St. Cloud MSA



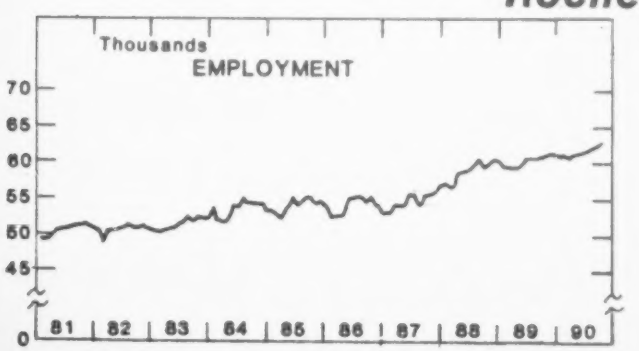


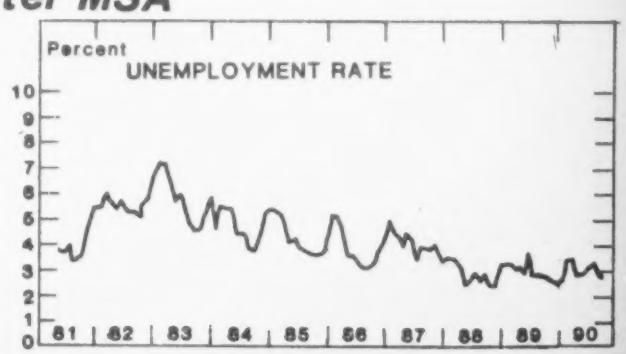
Duluth City





Rochester MSA





The Job Market

Regional Worker Job Shortages and Surplusses

Shortage occupations are difficult to fill or lack qualified applicants. A sizable excess of qualified applicants produces a worker surplus. A # after a job indicates that it has persisted for at least two of the last three quarters.

By Mike Casey

OCCUPATIONAL TRENDS IN UNEMPLOYMENT

The Minnesota unemployment rate has varied greatly over the past decade as it tracked the surplusses and shortfalls in worker availability. For experienced workers, the rate was 4.2% in 1979. It jumped to 7.4% in 1983, and by 1988 fell to a decade low of 3.6% (Figure 1). Specific occupations have their own unemployment histories. By watching the trends of these occupational groups, the impact of a changing economy on the labor force can be seen.

Managerial unemployment peaked at 3.7% in 1983, while the jobless rate for laborers was 17.5%. By 1988, laborers' unemployment was still high at 8.5% compared to 2.4% for managerial workers. Whether this trend will continue into the 1990s remains to be seen. It appears that some groups' lowest unemployment rates were in the late 80s. For others, they may have been in 1979. So far in 1990, unemployment (for experienced and inexperienced workers together) in Minnesota has stayed low, fluctuating between 4.2% and 5.4%, with October's 4.2% slightly above October 1989's 3.8%.

To determine current trends in the labor market, a useful tool is ratios derived by dividing the number of Job Service applicants by the number of job openings listed with Job Service. Called supply/demand (S/D) ratios, they give an idea of how many applicants are competing for each job each month (Figure 2). The higher the ratio, the tighter the job market. Although they are based only on applicants and jobs listed with Job Service, they provide current information. S/D occupational categories differ from those used for unemployment rates.

With the exception of the professional/technical/managerial group, October S/D ratios haven't changed much between 1989 and 1990. This suggests there has been little change in these occupations' unemployment rates. One thing to consider, though, is that data from a new computer processing system was implemented in September 1990, and any inactive applicants were purged from the files. This overstates the monthly change for September, implying that the S/D ratios dropped dramatically then in some occupational groups when this didn't really happen. The number of job openings fell slightly overall since last October (24,279 to 23,527), but shot up greatly for processing, and somewhat for sales, benchwork, and structural work. The S/D ratio for professional/technical/managerial rose mostly because recent applicants were staying active longer, yet the number of openings also fell since last October (2,211 to 1,969).

Occupations are affected differently by fluctuating economic conditions. As of October, Minnesota was still experiencing relatively low unemployment, although other indicators may suggest a recession is on the way. How various types of occupations would fare in a recession is not totally clear. Some economists hold that unemployment would not increase as much as it did in the last recession. Tracking these and other information sources may shed light on future possibilities.

By Tom Nash and Sue Borgfelt

Outlook

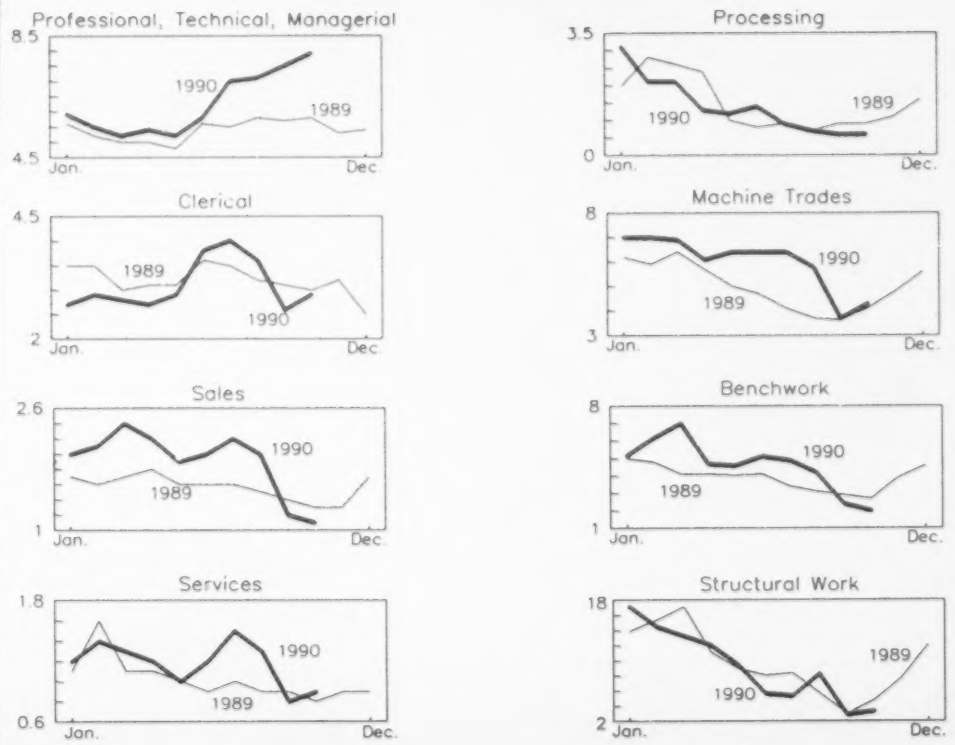
Figure 1: Minnesota Unemployment Rates by Occupation, 1979–1989*

	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989
Total All Occupations	4.2	5.2	5.0	6.9	7.4	5.7	5.3	4.8	5.0	3.6	3.9
Managerial	1.2	1.3	3.4	3.5	3.7	2.9	2.7	2.7	2.2	2.4	2.3
Professional/Technical	2.3	2.6	2.1	3.1							
Professional					2.6	2.1	2.2	1.2	2.1	1.6	0.9
Technicians					5.0	2.3	2.1	1.5	2.3	2.0	2.5
Sales	1.7	2.4	3.5	3.9	3.7	3.8	3.9	3.5	3.5	3.3	3.5
Clerical	2.1	4.3	3.9	5.4	5.9	3.8	4.6	4.6	4.3	3.2	3.7
Service	5.4	4.6	5.3	7.8	7.1	5.8	5.5	5.2	7.4	3.8	4.2
Craft/Repair	5.4	7.0	6.9	10.7	12.0	7.2	6.8	6.8	5.8	3.9	5.6
Machine Operators/Assemblers	5.9	12.9	9.2	16.3	15.0	11.2	11.7	9.0	6.5	6.4	7.6
Transportation/Material Moving	3.7	10.4	8.0	8.5	13.5	15.1	8.9	10.9	10.4	5.7	7.2
Laborers	9.5	14.5	13.8	16.6	17.5	13.5	8.8	10.5	11.9	8.5	7.3
Farming	1.3	2.4	1.6	1.8	6.2	5.4	6.6	2.6	2.8	2.9	3.1

* There is a break between 1982 and 1983 because of the switch from 1970 to 1980 Census occupational classifications. This affects all groups (except total), some more than others.

Source: Geographic Profile of Employment and Unemployment (1979 to 1989), U.S. Department of Labor.

Figure 2: Experienced Supply/Demand Ratios Monthly, 1989 and 1990



Source: Job Service data, Minnesota Department of Jobs and Training.

WORKER DISLOCATION: THE HUMAN COST OF CHANGE

When someone permanently loses his or her job, whether due to plant closing, merger, the sale of the corporation, or outdated skills, it is one of the toughest setbacks in life. Unfortunately, this is occurring with increasing frequency in many industries.

Many studies have analyzed the backgrounds of dislocated workers to find out what type of worker is typically affected by permanent loss of his or her job. The following is a summary of recent literature on worker dislocation, and the trends that may be in store for those who become displaced in today's uncertain job market.

The prevailing perception is that blue-collar workers are forced out of their jobs in economic downturns. College educated, white-collar professionals are supposed to almost never experience this type of upheaval in their careers. Trends in the past year or so have dispelled these notions.

Adam Seitchik and Jeffrey Zornitsky presented recent data and analysis of worker dislocation in their book *From One Job to the Next: Worker Adjustment in a Changing Labor Market* (Kalamazoo, MI, W.E. Upjohn Institute, 1989, 129 pp.). Their principal findings were presented in the September 1990 issue of the *Monthly Labor Review*:.

- Between 1981 and 1985, 10.8 million workers became dislocated in the United States. About half of them lost jobs in manufacturing, generally because of the shift in the American economy from goods producing industries to service industries.

- The ability of dislocated workers to get new jobs, and the wages they receive, depend on their skills and the industries from which they have been displaced. Once re-employed, full-time male workers earned between 15% and 20% less than other workers with similar characteristics (not surprising, since they lacked seniority). Of those re-employed by January 1986, 30% had been jobless for less than five weeks, although another 30% were jobless for more than 27 weeks. Two-thirds were successful in finding new jobs at comparable wages, and for those with at least three years' experience in their former job, half earned equivalent or higher wages in their new job (this was also substantiated in an article by Francis Horvath in the June 1987 issue of the *Monthly Labor Review).*

The problem for policy makers, according to Seitchik and Zornitsky, is whether training programs for dislocated workers should be designed to enable dislocated workers to seek comparable wage jobs (which may only be found in other declining industries), or to prepare them for jobs in growing industrial sectors such as services, where wages are usually lower. Their findings showed that only about half of all dislocated workers found jobs in similar occupations or industries. Many of the others were unwilling to accept a new job in a growing industry at a lower wage level. Thus, there is a mismatch between the need for workers in growing industries and the skills possessed by many dislocated workers. These workers simply are not interested in these lower wage jobs.

The authors also constructed a model for predicting one of three possible outcomes for dislocated workers: any new job; a new job in a growth sector; or a new job at a wage comparable to their old job. Their findings showed that the probability of the first and third outcomes increased with higher educational attainment. The probability of the second outcome was not statistically correlated with a higher educational level. Perhaps the most significant finding was that the third outcome, reemployment in a comparable wage job, was unlikely for less-educated dislocated workers.

From a policy perspective, it would follow that programs such as the 1988 Economic Displacement and Worker Adjustment Assistance Act (EDWAA) are most useful when they provide skill training to lower-income dislocated workers, as these people are more likely to be interested in employment in emerging industries (e.g., services) even though they don't pay as well as jobs in manufacturing.

Further supporting the contention that worker dislocation is not just a blue-collar problem is the November 5, 1990 *Newsweek* magazine discussion of current trends in layoffs. The article says that with a recession materializing throughout the country, white-collar professionals are no longer as immune to employment cutbacks as in previous economic downturns.

Many industries which hired large numbers of professionals during the prosperous 1980s are now having to cut staff. Professional employees, many with graduate degrees, are losing jobs in banking, financial services, real estate, advertising, marketing, publishing, and computer manufacturing and services firms. Profits are being squeezed, and mergers and consolidations among companies are making many positions redundant. Unlike many blue-collar workers, for whom seasonal layoffs are often expected, these mid- to upper level professional workers typically have not lost jobs or experienced pay cuts. The article cited data from the Bureau of Labor Statistics which showed that the percentage of the unemployed who were white-collar rose from 27% in 1983, to 33% by 1990, and to 37% by September 1990.

Major cities in the Northeast and the West Coast have the largest concentration of white-collar layoffs, but Midwestern business centers such as the Twin Cities will be more severely affected by downturns in professional employment if the current recession becomes more pervasive. This seems to be already occurring in Minnesota, as evidenced by computer firms and financial institutions restructuring and downsizing.

As more white-collar workers are laid off, and the competition for high- and mid-level professional jobs intensifies, the average spell of unemployment and job search will undoubtedly increase. In September 1990, laid-off worker remained unemployed an average of 12 weeks in Minnesota, almost a week longer than the average last year. Managers and professional workers are experiencing even longer periods of unemployment, often two or more weeks longer.

This shift toward job loss among the white-collared, and the finding that reemployment in a comparable wage job was unlikely for less-educated dislocated workers have implications for policy making. One of them is that lower-wage displaced workers are most likely to benefit from modest remediation and skills training. It would be more effective to match them to the lower-paying jobs emerging in growth industries.

Taxpayers, however, are unwilling to support the large investments needed to train higher-wage displaced workers for jobs at comparable wages. Unless workers are willing to bear (and can afford) the expenses of retraining, they face the very good prospect of a substantial loss of earnings.

By Kevin Alaspa

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